APPENDIX IV

LAND USE/LAND COVER	AREAS IN HUC-10 SUBWATERSHEDS (ACRES)						
	02	03	04	05	06	07	08
Deciduous Forest	13,181	95,521	50,174	16,294	7,992	16,294	1,029
Emergent Herbaceous Wetlands		18		7	101	7	6
Evergreen Forest	592	6,323	5,438	5,035	7,790	5,035	969
High Intensity: Commercial/Industrial/Transportation	64	1,154	158	10	36	10	1
High Intensity: Residential	24	357	1				
Low Intensity: Residential	319	1,954	51	18	1	18	19
Mixed Forest	2,250	14,084	6,529	5,140	4,985	5,140	583
Open Water	42	250	59	10	5,919	10	24
Other Grasses: Urban/Recreational	276	1,331	59	20	2	20	14
Pasture/Hay	13,508	43,855	8,105	1,805	513	1,805	36
Row Crops	6,005	22,866	2,610	714	145	714	17
Transitional	3	1,793	3,429	1,735	340	1,735	158
Woody Wetlands		329	46	267	57	267	
Quarries/Strip Mines		51		10		10	
Total	**36,265**	**189,886**	**76,659**	**31,065**	**27,881**	**31,065**	**1,856**

Table A4-1. Land Use Distribution in the Tennessee Portion of Pickwick Lake Watershed by HUC-10. *Data are from 1992 Multi-Resolution Land Characterization (MRLC) derived by applying a generalized Anderson Level II system to mosaics of Landsat thematic mapper images collected every five years.*

HYDROLOGIC SOIL GROUPS
GROUP A SOILS have low runoff potential and high infiltration rates even when wet. They consist chiefly of sand and gravel and are well to excessively drained.
GROUP B SOILS have moderate infiltration rates when wet and consist chiefly of soils that are moderately deep to deep, moderately to well drained, and moderately coarse to coarse textures.
GROUP C SOILS have low infiltration rates when wet and consist chiefly of soils having a layer that impedes downward movement of water with moderately fine to fine texture.
GROUP D SOILS have high runoff potential, very low infiltration rates, and consist chiefly of clay soils.

Table A4-2. Hydrologic Soil Groups in Tennessee as Described in WCS.

STATION	HUC-10	AGENCY	NAME	AREA (SQ MILES)	LOW FLOW (CFS)		
					1Q10	7Q10	3Q20
03587200	0603000502	USGS	Trib to Bluewater Creek				
03587300	0603000502	USGS	Bluewater Creek	38.8	3.3	3.8	3.1
03588000	0603000503	USGS	Shoal Creek	55.4	16.6	17.8	15.9
03587500	0603000503	USGS	Shoal Creek	27.0	5.5	6.1	5.2
03588500	0603000503	USGS	Shoal Creek				
03588400	0603000504	USGS	Chisholm Creek	43.0	9.93	10.5	8.98
350415088150201	0603000506	TVA	Tennessee River				

Table A4-3. Historical Streamflow Data Summary Based on Mean Daily Flows in Pickwick Lake Watershed*. USGS, United States Geological Survey; TVA, Tennessee Valley Authority.*

PARAMETER	SUBWATERSHED		
	03	05	06
E. coli	A, B, Y, Z		
Enterococcus	A, B, Y, Z	$	
Fecal Coliform	A , Y, Z, #	$	γ, δ
Fecal Streptococcus	#		
Alkalinity (Total)	Y, #	$	γ, δ
Color (Apparent)	Y		
Color (True)	Y		
Conductivity (Field)	A, B, Y, Z, #	$	γ, δ
BOD_5	#		
COD (Low)	Z		
DO	B, Y, Z, #		γ, δ
Flow	A, B, Y, Z		
Hardness (Total)	Y, Z, #	$	γ, δ
pH (Field)	A ,B, Y, Z, #		γ, δ
pH (Lab)		$	
Residue (Dissolved)	Y, Z	$	γ, δ
Residue (Settleable)	#		
Residue (Suspended)	Y, Z, #	$	γ, δ
Temperature	A, B, Y, Z, #		γ, δ
Turbidity	Y	$	γ, δ
Biorecon	A, B, Y, Z		γ, δ
RBP III	Y		γ, δ
Ag	Y, #		
Al	A, B		
Ammonia N	A, B, Y, Z, #	$	γ, δ
As	A, B, Y, Z, #	$	γ, δ
Cd	A, B, Y, Z, #	$	δ
Cl^-	Y	$	γ, δ
CN^-	Y	$	γ, δ
Cr (Total)	A, B, Y, Z, #	$	γ, δ
Cu	A, B, Y, Z, #	$	γ, δ
Fe	A, Y	$	γ, δ
Hg	Y, Z, #	$	γ, δ
Mn	A, B, Y, Z, #	$	γ, δ
N (Total Kjeldahl)	Y, Z	$	γ, δ
Ni	A, B, Y, Z, #	$	γ, δ
NO_2+NO_3	A, B, Y, Z, #	$	γ, δ
P (Total)	A, B, Y, Z, #	$	γ, δ
Pb	A, B, Y, Z, #	$	γ, δ
Se	A, B		
SO_4	Y		
TOC	Y	$	γ, δ
Zn	A, B, Y, Z, #	$	γ, δ

Table A4-4a. Water Quality Parameters Monitored in the Tennessee Portion of Pickwick Lake Watershed. *Codes are explained in Table A4-4b.*

CODE	STATION	ALIAS	AGENCY	LOCATION
A	LSHOA004.0LW		TDEC	Little Shoal Creek @ RM 4.0
B	**SHOAL053.5LW**		**TDEC**	**Shoal Creek @ RM 53.5**
C	SHOAL048.5LW		TDEC	Shoal Creek @ RM 58.5
D	SHOAL055.45LW		TDEC	Shoal Creek @ RM 55.45
E	LINDSEYLAKE		TDEC	Lindsey Lake
F	SHOAL054.05LW	SHOALCRIS20	TDEC	Shoal Creek @ RM 54.05
G	SHOAL054.06LW	SHOALCRIS19	TDEC	Shoal Creek @ RM 54.06
H	SHOAL054.1LW	SHOALCRIS18	TDEC	Shoal Creek @ RM 54.1
I	SHOAL054.2LW	SHOALCRIS17	TDEC	Shoal Creek @ RM 54.2
J	SHOAL054.3LW	SHOALCRIS16	TDEC	Shoal Creek @ RM 54.3
K	SHOAL054.4LW	SHOALCRIS15	TDEC	Shoal Creek @ RM 54.4
L	SHOAL054.5LW	SHOALCRIS14	TDEC	Shoal Creek @ RM 54.5
M	SHOAL054.6LW	SHOALCRIS13	TDEC	Shoal Creek @ RM 54.6
N	SHOAL054.75LW	SHOALCRIS11	TDEC	Shoal Creek @ RM 54.75
O	SHOAL054.7LW	SHOALCRIS12	TDEC	Shoal Creek @ RM 54.7
P	SHOAL054.85LW	SHOALCRIS09	TDEC	Shoal Creek @ RM 54.85
Q	SHOAL054.8LW	SHOALCRIS10	TDEC	Shoal Creek @ RM 54.8
R	SHOAL055.0LW	SHOALCRIS08	TDEC	Shoal Creek @ RM 54.0
S	SHOAL055.12LW	SHOALCRIS07	TDEC	Shoal Creek @ RM 54.12
T	SHOAL055.2LW	SHOALCRIS06	TDEC	Shoal Creek @ RM 55.2
U	SHOAL055.35LW	SHOALCRIS04	TDEC	Shoal Creek @ RM 55.35
V	SHOAL055.37LW	SHOALCRIS02	TDEC	Shoal Creek @ RM 55.37
W	SHOAL055.3LW	SHOALCRIS05	TDEC	Shoal Creek @ RM 55.3
X	03588500		USGS	Shoal Creek @ Iron City
Y	ECO71f27		TDEC	Swanegan Branch @ RM 0.48
Z	SHOAL032.2LW	002395	TDEC	Shoal Creek @ RM 32.2
#	SHOAL055.4		TDEC	Shoal Creek @ RM 55.4
$	MAY002.7WE	ECO65JO7	TDEC	May Branch @ RM 2.7
^	TENNE206.7	003360	TDEC	Tennessee River @ RM 206.7
Φ	TENNE210.0HD	TISSUE42	TDEC	Tennessee River @ RM 210.0
Ψ	TENNE214.4HD	003355	TDEC	Tennessee River @ RM 214.4
Ω	476433		TVA	Pickwick Reservoir @ State Park
α	476434		TVA	Pickwick Reservoir @ Bruton Bridge Rec Area
β	476799		TVA	Pickwick Forebay
γ	ECO65J04		TDEC	Pompeys Bridge @ RM 0.85
δ	ECO65JO5		TDEC	Dry Creek @ RM 3.19

Table A4-4b. Water Quality Monitoring Stations in the Tennessee Portion of Pickwick Lake Watershed*. TDEC, Tennessee Department of Environment and Conservation; USGS, United States Geologic Survey; TVA, Tennessee Valley Authority; NPS, National Park Service.*

FACILITY NUMBER	FACILITY NAME	SIC	SIC NAME	MADI	WATERBODY	HUC-10
TN0001473	Murray Incorporated	3524	Lawn and Garden Equipment	Major	Industrial Sewer to Shoal Creek @ RM 55.4, WWC to Unnamed Trib to Shoal Creek @ RM 56.2, WWC to Shoal Creek, WWC to Little Shoal Creek	0603000503
TN0001872	UCAR Carbon Co.	3624	Carbon and Graphite Products	Minor	Unnamed Trib to Shoal Creek @ RM 51.9, Redding Branch	0603000503
TN0065501	Loretto STP	4952	Sewerage System	Minor	Shoal Creek @ RM 38.0	0603000503

Table A4-5. Active Permitted Point Source Facilities in the Tennessee Portion of Pickwick Lake Watershed. *SIC, Standard Industrial Classification; MADI, Major Discharge Indicator; WWC, Wet Weather Conveyance.*

FACILITY NUMBER	PERMITEE	SIC	SIC NAME	WATERBODY	HUC-10
TN0057967	Rogers Group	1422	Crushed and Broken Limestone	Crowson Ck	0603000503

Table A4-6. Active Permitted Mining Sites in the Tennessee Portion of Pickwick Lake Watershed. *SIC, Standard Industrial Classification.*

FACILITY NUMBER	FACILITY NAME	SECTOR	RECEIVING STREAM	AREA (ACRES)	HUC-10
TNR054464	Hale Products, Incorporated	AB	Little Bluewater Creek	4.1	0603000502
TNR050398	Dura Automotive Systems	AB, Y	Little Shoal Creek	7.0	0603000503
TNR050467	Graphic Packaging Corp.	B, X	Little Shoal Creek	10.0	0603000503
TNR050536	Modine Manufacturing Co.	AB	Shoal Creek	24.6	0603000503
TNR050876	Hughes Hardwood	A, P	Butler Creek Roanoake Fork	7.4	0603000503
TNR051632	Edwards Oil Company	P	Little Shoal Creek	4.5	0603000503
TNR053019	Sharp Transport	P	None	3.3	0603000503
TNR053564	United Parcel Service	P	Unnamed Trib to Shoal Creek	0.8	0603000503
TNR053602	Lawrence County Airport	S	Dry Land Creek	0.5	0603000503
TNR053747	Lawrenceburg Vault Company	E	Beeler Fork	2.7	0603000503
TNR053757	Hughes Parker Industries	AB, AA	Unnamed Trib to Little Shoal Creek	12.5	0603000503
TNR054414	Lindsey Manufacturing Co.	W	Shoal Creek	1.5	0603000503
TNR055071	Dyna-Pak Corporation	B	Little Shoal Creek	7.0	0603000503
TNR055909	All-Star Auto Salvage	M	Big Dry Creek	32.0	0603000503

Table A4-7. Active Permitted TMSP Facilities in the Tennessee Portion of Pickwick Lake Watershed. *Area, acres of property associated with industrial activity. Sector details may be found in Table A4-8.*

SECTOR	TMSP SECTOR NAME
A	Timber Products Facilities
AA	Facilities That Manufacture Metal Products including Jewelry, Silverware and Plated Ware
AB	Facilities That Manufacture Transportation Equipment, Industrial or Commercial Machinery
AC	Facilities That Manufacture Electronic and Electrical Equipment and Components, Photographic and Optical Goods
AD	Facilities That Are Not Covered Under Sectors A Thru AC (Monitoring Required)
AE	Facilities That Are Not Covered Under Sectors A Thru AC (Monitoring Not Required)
B	Paper and Allied Products Manufacturing Facilities
C	Chemical and Allied Products Manufacturing Facilities
D	Asphalt Paving, Roofing Materials, and Lubricant Manufacturing Facilities
E	Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities
F	Primary Metals Facilities
G	Metal Mines (Ore Mining and Dressing) (RESERVED)
H	Inactive Coal Mines and Inactive Coal Mining-Related Facilities
I	Oil or Gas Extraction Facilities
J	Construction Sand and Gravel Mining and Processing and Dimension Stone Mining and Quarrying Facilities
K	Hazardous Waste Treatment Storage or Disposal Facilities
L	Landfills and Land Application Sites
M	Automobile Salvage Yards
N	Scrap Recycling and Waste and Recycling Facilities
O	Steam Electric Power Generating Facilities
P	Vehicle Maintenance or Equipment Cleaning areas at Motor Freight Transportation Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil Stations and Terminals, the United States Postal Service, or Railroad Transportation Facilities
Q	Vehicle Maintenance Areas and Equipment Cleaning Areas of Water Transportation Facilities
R	Ship or Boat Building and Repair Yards
S	Vehicle Maintenance Areas, Equipment Cleaning Areas or From Airport Deicing Operations located at Air Transportation Facilities
T	Wastewater Treatment Works
U	Food and Kindred Products Facilities
V	Textile Mills, Apparel and other Fabric Product Manufacturing Facilities
W	Furniture and Fixture Manufacturing Facilities
X	Printing and Platemaking Facilities
Y	Rubber and Miscellaneous Plastic Product Manufacturing Facilities
Z	Leather Tanning and Finishing Facilities

Table A4-8. TMSP Sectors and Descriptions.

LOG NUMBER	COUNTY	DESCRIPTION	WATERBODY	HUC-10
97.052	Lawrence	Gravel Dredging	Dixon Branch	0603000502
98.284	Wayne	Bridge Replacement	Little Cypress Creek	0603000502
98.285	Wayne	Bridge Replacement	Rich Branch	0603000502
00.109	Lawrence	Gravel Dredging	Blue Water Creek	0603000502
96.329	Lawrence	Bridge Replacement Minor Road Crossing	Wolf Creek	0603000503
97.405	Wayne	Road Crossing	Last Buffer Creek	0603000503
97.639	Lawrence	Stream Rebuilding Revegetation	Knob Creek	0603000503
97.643	Lawrence	Stream Relocation	Shoal Creek	0603000503
98.283	Wayne	Bridge Replacement	Roanoake Creek	0603000503
98.286	Wayne	Bridge Replacement	Waterfall Creek	0603000503
98.557	Lawrence	Impound. Const. Repair	West Fork Sugar Creek	0603000503
9808.0003	Lawrence	Water Line Replacement	Little Shoal Creek	0603000503
9810.150	Lawrence	Debris removal	Hardy Branch	0603000503
9810.151	Lawrence	Bank Stabilization	Hardy Branch	0603000503
99.348	Lawrence	Channel Cleanout Gravel Dredging	Coon Creek	0603000503
9908.0020	Lawrence	Minor Road Crossing	Shoal Creek	0603000503
9908.0031	Lawrence	Gravel Dredging	Knob Creek	0603000503
00.086	Lawrence	Bridge Replacement	Unnamed Trib to Shoal Creek,Unnamed Trib to Coon Creek	0603000503
94.032	Lawrence	Gravel Dredging	Factory Creek	0603000504
96.446	Wayne	Pipeline Repair	Shawnette Creek Middle Butler Creek Silvermine Hollow Creek	0603000504
96.491	Lawrence	Road Crossing	Chisholm Creek	0603000504
96.563	Wayne	Stream Relocation	Haggarty Branch	0603000504
97.794	Wayne	Bridge Replacement	Double Branch	0603000504
97.795	Wayne	Bridge replacement	Double Branch	0603000504
98.321	Wayne	Bridge replacement	Sweetwater Branch	0603000504
9808.0010	Wayne	Bank Stabilization	Factory Creek	0603000504
97.322	Wayne	Box Bridge Construction	Cooper Branch	0603000505
98.317	Wayne	Bridge Replacement	Cooper Branch	0603000505
98.322	Wayne	Bridge Replacement	Cypress creek	0603000505
9908.0009	Wayne	Minor Road Crossing	Cypress Creek	0603000505
96.338	Wayne	Road Crossing	Tally Branch	0603000507
97.454	Wayne	Bridge Replacement	Second Creek	0603000507

Table A4-9. Individual ARAP Permits Issued January 1994 Through June 2000 in the Tennessee Portion of Pickwick Lake Watershed.